REMARKS

In accordance with the foregoing, claims 1, 3, 14, 17 have been amended, with support for the amendments found throughout the specification and claims. Claim 18 has been cancelled and claims 19 and 20 have been added. Claims 1-17 and 19-20 are currently pending, with claims 1, 14 and 17 being independent.

Applicant appreciated the opportunity to meet with the patent examiners on October 10, 2006. During that interview, the Applicant agreed to make certain amendments to the claims for purposes of clarity. The discussion also included suggestions for claim amendments to define a "sealed" or "enclosed" compartment and to consider the addition of a "flat back wall" to distinguish Velandia (U.S. Patent No. 6,144,751) from Applicant's invention.

Applicant has included a limitation to distinguish Velandia by defining the enclosed compartment as having a single opening and as having no vent or port to the external environment in claims 1 and 14, respectively, and defining a second chamber as being sealed except for an aperture, in claim 17. Applicant's attorney notes that a limitation that includes a flat back wall has not been added to independent claims 1, 14 or 17 since Applicant's attorney believes that this limitation was suggested only for purposes of considering additional distinguishing features. Thus, a limitation that includes a flat back wall has only been added in new claims 19 and 20, which depend from claims 1 and 14, respectively.

1. Objections to Claims 1 and 14

Claims 1 and 14 have been objected to on account of certain informalities. Applicant believes that the informalities have been corrected and requests withdrawal of the objections.

2. Rejection under 35 USC § 112

Claim 1 has been rejected to due lack of antecedent basis. Applicant believes that the antecedent basis issue has been addressed with the proposed amendment to claim 1 and requests withdrawal of the rejection.

2. Rejections under 35 USC § 103

Claims 1, 14, 15 and 17

Claims 1, 14, 15 and 17 have been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362). Claim 1 as amended recites an apparatus for improving the acoustic impedance for a loudspeaker that includes a first enclosure with six walls connected to define a first box structure having three surfaces of the walls defining a first wave-guide, a second enclosure disposed within said first enclosure, the second enclosure having at least three walls attached to a front wall of the first enclosure to define a second box structure with an enclosed compartment between the first enclosure and the second enclosure, three surfaces of the walls being of the second enclosure being a second wave-guide, an aperture located in a wall of the second enclosure defining a single opening into the enclosed compartment, a termination member at the ends of the first and second wave-guides, a surface of the termination member defining a third wave-guide and an alternative density transmission medium covering a majority of a surface of at least one of the wave-guides.

In contrast, Velandia teaches a band-pass design that includes a multi-ported inner cabinet nested in an outer cabinet. See Fig. 8. Burwood-Hoy teaches a noise reduction device with an input port and an output port. See Figs. 1A-1C. Thus, neither reference describes or suggests a second box structure disposed within a first box structure with an enclosed compartment between the two enclosures and an aperture located in a wall of the second enclosure defining a single opening into the enclosed compartment with the first, second and third wave-guides.

In addition, Burwood-Hoy discusses noise reduction techniques that include the use of foam in an acoustic duct to **dampen** or **attenuate** soundwaves. See Col. 5, lines 24-27. Thus, Burwood-Hoy essentially teaches away from Applicant's invention since the function of the foam in Burwood-Hoy is to **deaden** a soundwave while Applicant claims an interaction of a sound wave with the alternative density transmission medium in the enclosed compartment to improve acoustic impedance of the apparatus.

Accordingly, Applicant respectfully requests withdrawal of the rejection to claim 1 and the claims depending therefrom.

Claim 14 recites a speaker system that includes a first cabinet, a second cabinet having a common front wall with the first cabinet and having at least three walls attached to walls of the first cabinet to define an enclosed compartment between the first cabinet and the second cabinet, the enclosed compartment having no vent or port to the external environment, an aperture between the first cabinet and the second cabinet, and an alternative density transmission medium in the enclosed compartment and attached to a wall of the second cabinet and/or the first cabinet, wherein a sound wave passes through the aperture into the enclosed compartment, interacts with the alternative density transmission medium and is reflected back through the aperture to improve the acoustic impedance of the speaker system.

Similar to the argument raised above with respect to claim 1, neither Velandia or Burwood-Hoy describe or suggest a first cabinet and a second cabinet having a common front wall with the first cabinet and having at least three walls attached to walls of the first cabinet. In addition the combination of Velandia and Burwood-Hoy does not describe or suggest an enclosed compartment between the first cabinet and the second cabinet, the enclosed compartment having no vent or port to the external environment, and an aperture between the first cabinet and the second cabinet. Moreover, Velandia and Burwood-Hoy do not describe or suggest a design that causes a sound wave to pass through the aperture into the enclosed compartment, interact with the alternative density transmission medium and get reflected back through the aperture to improve the acoustic impedance of the speaker system.

Accordingly, Applicant respectfully requests withdrawal of the rejection to claim 14 and the claims depending therefrom.

Claim 17 recites a method of moderating a bias pressure caused by a reflected sound wave in a speaker enclosure, the method including producing a sound wave with a speaker in a first chamber, directing the sound wave through an aperture from a first chamber to a second chamber of the speaker enclosure, the second chamber being sealed except for the aperture, compressing a foam material in the second chamber with the directed sound wave, the amount of compression varying according to the frequency and the intensity of the sound wave and reflecting the sound wave back into the first chamber to moderate the bias pressure in the speaker enclosure.

Velandia describes a method of directing a soundwave through an elongated port and Burwood-Hoy discusses a method that includes suppressing sound by directing airflow into an inlet duct with an active noise cancellation circuit and through a separate exhaust port. Thus, neither Velandia or Burwood-Hoy describe or suggest a method that includes directing a sound wave through an aperture from a first chamber to a second chamber, the second chamber being sealed except for the aperture, compressing a foam material in the second chamber with the directed sound wave, the amount of compression varying according to the frequency and the intensity of the sound wave and reflecting the sound wave back into the first chamber to moderate the bias pressure in the speaker enclosure. Accordingly, Applicant respectfully requests withdrawal of the rejection to claim 17.

Claims 2, 3, 11 and 12

Claims 2, 3, 11 and 12 have been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362) further in view of Croft (U.S. Patent No. 6,169,811).

Claims 2, 3, 11 and 12 depend from claim 1. Thus, the Applicant requests withdrawal of the rejection for the same reasons described above with respect to claim 1.

Claims 6, 8, 9 and 13

Claims 6, 8, 9 and 13 have been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362) further in view of Croft (U.S. Patent No. 6,389,146). Since claims 6, 8, 9 and 13 depend from claim 1, Applicant requests withdrawal of the rejection for the same reasons described above with respect to claim 1.

Claim 4

Claim 4 has been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362) further in view of Rocha (U.S. Patent No. 6,094,495). Since claim 4 depends

from claim 1, Applicant requests withdrawal of the rejection for the same reasons described above with respect to claim 1.

Claim 5

Claim 5 has been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362) further in view of Norris (U.S. Patent Pub. 2002/0076069). Since claim 5 depends from claim 1, Applicant requests withdrawal of the rejection for the same reasons described above with respect to claim 1.

Claim 7

Claim 7 has been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362) further in view of Croft (U.S. No. 6,389,146) and Rocha (U.S. Patent No. 6,094,495). Since claim 7 depends from claim 1, Applicant requests withdrawal of the rejection for the same reasons described above with respect to claim 1.

Claim 16

Claim 16 has been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362) further in view of Takahashi (U.S. Patent No. 6,013,362). Since claim 16 depends from claim 14, Applicant requests withdrawal of the rejection for the same reasons described above with respect to claim 14. Moreover, Takahashi describes a "soundproof" material, which essentially teaches away from the purpose of Applicant's invention.

Claim 10

Claim 10 has been rejected under 35 USC § 103 as being unpatentable over Velandia (U.S. Patent No. 6,144,751) in view of Burwood-Hoy (U.S. Patent No. 5,452,362) further in view of Croft (U.S. Patent No. 6,389,146) and Takahashi (U.S. Patent No. 6,013,362). Since claim 10 depends from claim 1, Applicant requests

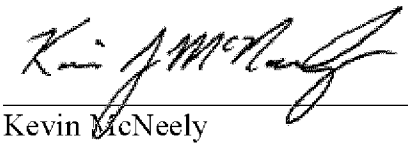
withdrawal of the rejection for the same reasons described above with respect to claim 1. Moreover, Takahashi describes a "soundproof" material, which essentially teaches away from the purpose of Applicant's invention.

CONCLUSION

Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Kevin McNeely, Applicant's Attorney at 202 274-0214 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is respectfully requested.

Respectfully Submitted,



October 23, 2006
Date

Kevin McNeely
Attorney/Agent for Applicant(s)
Reg. No. 52018

Kevin McNeely
Patent Attorney
5335 Wisconsin Avenue, NW
Suite 440
Washington, DC 20015
Tel. 202 274-0214